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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/684,512 10/15/2003 Thomas M. Pillow PILL.0003 38327 7590 11/18/2004 **EXAMINER REED SMITH LLP** MEISLIN, DEBRA S 3110 FAIRVIEW PARK DRIVE, SUITE 1400 ART UNIT PAPER NUMBER FALLS CHURCH, VA 22042 3723

DATE MAILED: 11/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                      | •                                                                                                                       |                                                                                                   | <del></del> \$ | <u>;</u> |
|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|----------------|----------|
|                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Application                                                                          |                                                                                                                         | Applicant(s)                                                                                      |                |          |
| Office Action Summary                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 10/684,51                                                                            | 2                                                                                                                       | PILLOW, THOMAS M.                                                                                 |                |          |
|                                                     | omeo neden cumulary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Examiner                                                                             |                                                                                                                         | Art Unit                                                                                          |                |          |
|                                                     | The MAILING DATE of this communication app                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Debra S M                                                                            |                                                                                                                         | 3723                                                                                              | ldross         |          |
| Period fo                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | pears on are                                                                         | cover sneet with the                                                                                                    | correspondence de                                                                                 | u/035          |          |
| THE - External after - If the - If NO - Failthe Any | ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a repl period for reply is specified above, the maximum statutory period are to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b). | 136(a). In no eve<br>ly within the statu<br>will apply and wil<br>e, cause the appli | nt, however, may a reply be<br>tory minimum of thirty (30) d<br>I expire SIX (6) MONTHS fro<br>cation to become ABANDON | timely filed  ays will be considered timely in the mailing date of this or NED (35 U.S.C. § 133). |                |          |
| Status                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                      |                                                                                                                         |                                                                                                   |                |          |
| 1)                                                  | Responsive to communication(s) filed on                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                      |                                                                                                                         |                                                                                                   |                |          |
| 2a)□                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | M This action is non-final.                                                          |                                                                                                                         |                                                                                                   |                |          |
| 3)                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                      |                                                                                                                         |                                                                                                   |                |          |
| ,                                                   | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                      |                                                                                                                         |                                                                                                   |                |          |
| Disposit                                            | ion of Claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                      |                                                                                                                         |                                                                                                   |                |          |
| -<br>4)⊠                                            | Claim(s) 1-15 is/are pending in the application                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>\</b>                                                                             | •                                                                                                                       |                                                                                                   |                |          |
| اکار.                                               | 4a) Of the above claim(s) is/are withdrawn from consideration.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                      |                                                                                                                         |                                                                                                   |                |          |
| 5)□                                                 | Claim(s) is/are allowed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                      |                                                                                                                         |                                                                                                   |                |          |
|                                                     | Claim(s) <u>1-15</u> is/are rejected.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                      |                                                                                                                         |                                                                                                   |                |          |
| •                                                   | 7) Claim(s) is/are objected to.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                      |                                                                                                                         |                                                                                                   |                |          |
| · · · · ·                                           | Claim(s) are subject to restriction and/o                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | or election re                                                                       | quirement.                                                                                                              |                                                                                                   |                |          |
| Applicat                                            | ion Papers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                      |                                                                                                                         |                                                                                                   |                |          |
| 9)□                                                 | The specification is objected to by the Examine                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | er.                                                                                  |                                                                                                                         |                                                                                                   |                |          |
| ,—                                                  | 10)⊠ The drawing(s) filed on is/are: a)□ accepted or b)⊠ objected to by the Examiner.                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                      |                                                                                                                         |                                                                                                   |                |          |
| ,                                                   | Applicant may not request that any objection to the                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | -                                                                                    |                                                                                                                         |                                                                                                   |                |          |
|                                                     | Replacement drawing sheet(s) including the correct                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | tion is require                                                                      | ed if the drawing(s) is o                                                                                               | bjected to. See 37 CF                                                                             | FR 1.121(d).   |          |
| 11)[                                                | The oath or declaration is objected to by the Ex                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | xaminer. No                                                                          | te the attached Offic                                                                                                   | e Action or form PT                                                                               | O-152.         |          |
| Priority (                                          | ınder 35 U.S.C. § 119                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                      |                                                                                                                         |                                                                                                   |                |          |
| -<br>12)□                                           | Acknowledgment is made of a claim for foreign                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | priority und                                                                         | ler 35 U.S.C. & 119(                                                                                                    | a)-(d) or (f).                                                                                    |                |          |
|                                                     | ☐ All b)☐ Some * c)☐ None of:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                      |                                                                                                                         | - / (- / ( / -                                                                                    |                |          |
| ,                                                   | 1. Certified copies of the priority document                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ts have beer                                                                         | received.                                                                                                               |                                                                                                   |                |          |
|                                                     | 2. Certified copies of the priority document                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                      |                                                                                                                         | ition No                                                                                          |                |          |
|                                                     | 3. Copies of the certified copies of the prio                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | rity docume                                                                          | nts have been recei                                                                                                     | ved in this National                                                                              | Stage          |          |
|                                                     | application from the International Bureau                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | u (PCT Rule                                                                          | : 17.2(a)).                                                                                                             |                                                                                                   |                |          |
| * 5                                                 | See the attached detailed Office action for a list                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | of the certif                                                                        | ied copies not receiv                                                                                                   | red.                                                                                              |                |          |
|                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                      |                                                                                                                         |                                                                                                   |                |          |
| Attachmen                                           | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                      | _                                                                                                                       |                                                                                                   |                |          |
|                                                     | e of References Cited (PTO-892)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                      | 4) Interview Summa                                                                                                      |                                                                                                   |                |          |
|                                                     | e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08)                                                                                                                                                                                                                                                                                                                                                                                                                                       | •                                                                                    | Paper No(s)/Mail (5) Notice of Informal                                                                                 |                                                                                                   | )-152)         |          |
|                                                     | r No(s)/Mail Date <u>10/15/03</u> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                      | 6) Other:                                                                                                               |                                                                                                   |                |          |

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- 1. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the drawings are substantially informal which prevents a clear understanding of the claimed structure. Applicant must provide further figures that clearly show the internal structure of the housings (e.g., a cross-section of each housing). Applicant must also provide a clear understanding of the "locking ring". The figures appear to disclose a threaded sleeve. It is not clear as to the "locking" function of the ring "29". The removability of the shafts, gears, and bearings must be shown in the drawings. The drawings must show the extension connected to a housing as set forth in claim 13. Applicant is cautioned against the inclusion of new matter.
- 2. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

#### 3. INFORMATION ON HOW TO EFFECT DRAWING CHANGES

### **Replacement Drawing Sheets**

Drawing changes must be made by presenting replacement figures which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments, or remarks, section of the amendment. Any replacement drawing sheet must be identified in the top margin as "Replacement Sheet" (37 CFR 1.121(d)) and include all of the figures appearing on the immediate prior version of the sheet, even though only one figure may be amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

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Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin.

## **Annotated Drawing Sheets**

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing sheets must be clearly labeled as "Annotated Marked-up Drawings" and accompany the replacement sheets.

## **Timing of Corrections**

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

4. Claims 1-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The structure of the "threaded locking ring" is not understood in view of the specification and drawings. The structure which provides removability of the shafts, gears, and bearings is not clear in view of the specification and drawings. The structure and use of the "at least one straight extension" is not understood in view of the specification and drawings.

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5. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, "a first shaft intersecting via the first beveled gear" and "a second shaft intersecting via the second beveled gear" are not understood and appear to be grammatically incorrect.

Claim 3 lacks a period at the end thereof.

In claim 6, "than then" is not understood.

In claim 7, the recitation is misdescriptive since the angles and pitches of the gears do not vary in the device (the extension) as set forth in claim 1. The angles and gears, however, do correspond with the selected non-zero and non-180-degree angle. For the angles and pitches to vary, applicant would have to have claimed a plurality of devices (extensions) having varying non-zero and non-180-degree angles.

In claim 8, the recitation is misdescriptive since the shapes of the housings do not vary in the device (the extension) as set forth in claim 1. The shapes of the housings may, however, correspond with the selected non-zero and non-180-degree angle. For the shapes of the housings to vary, applicant would have to have claimed a plurality of devices (extensions) having varying non-zero and non-180-degree angles.

In claim 9, the recitation is misdescriptive since the angle and a pitch of the threaded ring do not vary in the device (the extension) as set forth in claim 1. The angle and a pitch of the threaded ring may, however, correspond with the selected non-zero and non-180-degree angle. For the angle and a pitch of the threaded ring to vary,

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applicant would have to have claimed a plurality of devices (extensions) having varying non-zero and non-180-degree angles.

In claim 10, "are inter-changeably engage" is not understood and appears to be grammatically incorrect. Claim 10, as a whole, is not understood.

Claim 13 is not understood. Note that the drawings do not appear to disclose "extensions". Also "he" should be --The--.

Claim 14 does not further limit the claims since the driving tool is not a part of the claimed device. The claims are directed to and "extension" and not to the combination of an extension and a driving tool.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 7. Claims 1, 4-10, and 14 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Lampke.
- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claims 1-10, 12 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frenkel in view of Church or Hofman.

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Frenkel discloses all of the claimed subject matter except for having "threadably" attached housings. Frenkel discloses "snap fit" attached housings. Church or Hofman disclose "threadably" attached housings. It would have been obvious to one having ordinary skill in the art to form the snap fit of Frenkel as threaded as such would have been an obvious mechanical equivalent to attach housings as taught by Church or Hofman.

The examiner takes Official Notice that the use of "sealed" bearing is notoriously old and well known in the art to provide for longevity of the bearings. Consequently, It would have been obvious to one having ordinary skill in the art to form the bearings of Frenkel as sealed for their known properties as such is notoriously old and well known in the art.

10. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Frenkel in view of Church or Hofman as applied above, in further view of Lasko.

Lasko discloses threaded shaft effds. It would have been obvious to one having ordinary skill in the art to form the shaft ends of Frenkel as threaded to enable the engagement of a threaded driven or driven tool and as such is an obvious mechanical equivalent as taught by Lasko.

11. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lampke in view of Lasko.

Lampke discloses all of the claimed subject matter except for having threaded shaft ends. Lasko discloses threaded shaft ends. It would have been obvious to one having ordinary skill in the art to form the shaft ends of Lampke as threaded to enable

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the engagement of a threaded driven or driven tool and as such is an obvious mechanical equivalent as taught by Lasko.

12. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Frenkel in view of Church or Hofman as applied above, in further view of Klopper.

Klopper discloses an extension (2', 3) attached to a housing (1). It would have been obvious to one having ordinary skill in the art to form the device of Frenkel with an extension to extend the housing to enable the use of the tool in awkward places as taught by Klopper.

13. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lampke in view of Klopper.

Lampke discloses all of the claimed subject matter except for having an extension. Klopper discloses an extension (2', 3) attached to a housing (1). It would have been obvious to one having ordinary skill in the art to form the device of Lampke with an extension to extend the housing to enable the use of the tool in awkward places as taught by Klopper.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Debra S Meislin whose telephone number is 703 308-3671. The examiner can normally be reached on M-F, alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 703 308-2687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Debra S Meislin Primary Examiner Art Unit 3723

November 10, 2004